

## SHARED CODEC IN MULTIPROCESSOR SYSTEMS

### Abstract of The Disclosure

A single coder/decoder shared among several multiprocessors in a digital signal processing system through time-division multiplexing between multiple processors to enhance signal processing capabilities by assigning different digital-to-analog channels to different processors for digital-to-analog conversion, while allowing all processors to operate on the same analog-to-digital data for analog-to-digital conversion, thereby resulting in chip area reduction and power consumption saving.